Marginalia:
Web Annotation for Engaged Teaching and Learning

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An Age-Old Tradition
Annotation: A Proven Learning Tool
Online reading poses problems
NARRATIVE OF THE THIRD VOYAGE, 1498-1500
(EXCERPT)

CHRISTOPHER COLUMBUS

I have always read that the world comprising the land and the water was spherical, and the recorded experiences of Ptolemy and all others have proved this by the eclipses of the moon and other observations made from East to West, as well as the elevation of the Pole from North to South. But as I have already described, I have now seen so much irregularity, that I have come to another conclusion respecting the Earth, namely, that it is not round as they describe, but of the form of a pear, which is very round except where the stalk grows, at which part it is most prominent; or like a round ball upon part of which is a prominence like a woman’s nipple, this protrusion being the highest and nearest the sky, situated under the equinoctial line, and at the eastern extremity of this sea...
Outline

Act 1: Annotation then & now
Act 2: Web annotation in Teaching & Learning
Act 3: Open Source + Open Web
Act 4: Annotation in the classroom
Act 5: Annotation activity
1. Annotation Then & Now
Ancient Ed-Tech
The Annotation

In context, In layers

Focused conversations

Additive to material

“Aristotle, Libri Naturales”, 13th Century
British Library
Web Standard

On Feb 23, 2017 the W3C formally standardized Web Annotations

w3.org/annotation

*Formal votes of support in October 2014
## Annotation in the era of print

<table>
<thead>
<tr>
<th>READ</th>
<th>WRITE</th>
<th>METHOD</th>
<th>USE CASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>SOME</td>
<td>PUBLISHER LAYER</td>
<td>Midrash, commentaries, critical editions, other curated supplements to primary text</td>
</tr>
<tr>
<td>ONE</td>
<td>ONE</td>
<td>PRIVATE ANNOTATION</td>
<td>Personal marginalia, notetaking</td>
</tr>
</tbody>
</table>
Annotation on the open web

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<tbody>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>PUBLIC ANNOTATION</td>
<td>Open learning &amp; social conversation</td>
</tr>
<tr>
<td>ALL</td>
<td>SOME</td>
<td>PUBLISHER LAYER</td>
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</tr>
<tr>
<td>SOME</td>
<td>SOME</td>
<td>PRIVATE ANNOTATION GROUP</td>
<td>Educational classes, editorial review, affinity groups</td>
</tr>
<tr>
<td>ONE</td>
<td>ONE</td>
<td>PRIVATE PERSONAL ANNOTATION</td>
<td>Personal marginalia, notetaking</td>
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</tbody>
</table>

Open web annotation doesn’t just **enable new kinds of annotation**, it makes each of these methods possible **on the same text at the same time**.
Layers of Annotation
Built on Open Standards

General Public

UT Austin Bio 101

Expert Community

Private Notes

Any Website, Article, eBook, Document, Multimedia
2. Web Annotation for Teaching & Learning
We have all seized the white perimeter as our own and reached for a pen if only to show we did not just laze in an armchair turning pages; we pressed a thought into the wayside, planted an impression along the verge.

– Billy Collins, “Marginalia”
Online, a book can be a gathering place, a shared space where readers record their reactions and conversations. Those interactions ultimately become part of the book too, a kind of amplified marginalia.

I finally found a way to get students to read, and engage with one another about their reading, before class.

— Andrew Martin, Professor, Department of Ecology and Evolutionary Biology, University of Colorado Boulder
I want students to learn the profits and pleasures of careful, engaged reading. To cultivate this kind of reading and learning online, I want tools that can deliver on the promise of digital annotation.

— Lawrence Hanley, English Professor, San Francisco State
When I’m reading I sometimes wonder, ‘Does anyone actually understand this? Am I crazy?’ With this tool I know I’m not alone.

— Shannon Griffiths, undergraduate student at Plymouth State University
Empowering students to act as knowledge producers within and beyond the classroom

Empowering substantive intellectual conversation and civic participation across the web
Open web annotation can be more than text on text
At left: Pressbooks page with rich annotations.

Open web annotations can theoretically contain any browser-supported web element. **Examples:**

1. Images
2. Embedded video [iframe element]
3. External links
4. Embedded audio [HTML5 audio element]

For more: see Steel’s writing about adding interactivity to web annotations or his talk at iAnnotate 2018
3. Open Source + Open Web
Pressbooks
Pressbooks is “an online book publishing platform that makes it easy to generate clean, well-formatted books in multiple outputs. Pressbooks is built on WordPress and is open source.”

— Hugh McGuire, Pressbooks founder
Pressbooks is a Network

- Each PB instance is a centrally-managed network (a WordPress multisite) which can contain an enormous number of separate “books.”
- Each “book” has a unique web address. Books on the same network can have different structures, appearances, copyright licenses, & permissions.
What is a Pressbook?

Published books exist as standalone web texts featuring:

1. Title & descriptive information
2. Cover image
3. Download options
4. Table of contents
5. Additional licensing information & metadata [not shown]
The Hypothesis Project
The Web works because, through standards, everyone can build on it—and no one owns it. The conversation over the web should be the same, and the organization behind it should be aligned with that outcome.
Our Team

100% dedicated to open annotation

1. Technology
2. Services
3. Adoption
4. Integrations
5. Partnerships
6. Use cases
Sign up for an Hypothesis account:

Visit http://hypothes.is/signup and confirm account via email.
Browser Extensions

Add Hypothesis to your browser.

Install our Chrome extension or add the bookmarklet to your preferred browser.

Click the button below to install the Hypothesis extension from the Chrome Web Store.

For any browser, drag this button to the bookmarks bar, or right-click/control-click to bookmark the link.

**Chrome extension** and a **bookmarklet** (for other browsers)
LMS App with Single Sign On

Configure Hypothesis to appear on readings
Select text to **annotate**

- **Select text to annotate.**
  Add tags and post publicly or save privately.

- **Reply to or share any annotation.**
  Link to notes or whole pages.

- **Annotate together in groups.**
  Collaborate privately with others.

- **Search your notes.**
  Explore all public annotations and profiles.
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4. Annotation in the Classroom
Psychobiotics and the gut–brain axis: in the pursuit of happiness

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Jane A Foster2
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Abstract: The human intestine houses an astounding number and species of microorganisms, estimated at more than $10^{14}$ gut microbiota and composed of over a thousand species. An individual’s profile of microbiota is continually influenced by a variety of factors including but not limited to genetics, age, sex, diet, and lifestyle. Although each person’s microbial profile is distinct, the relative abundance and distribution of bacterial species is similar among healthy individuals, aiding in the maintenance of one’s overall health. Consequently, the ability of gut microbiota to bidirectionally communicate with the brain, known as the gut–brain axis, in the modulation of human health is at the forefront of current research. At a basic level, the gut microbiota interacts with the human host in a mutualistic relationship – the host intestine provides the bacteria with an environment to grow and the bacteria aids in governing homeostasis within the host. Therefore, it is reasonable to think that the lack of healthy gut microbiota may also lead to a deterioration of these relationships and ultimately disease. Indeed, a dysfunction in the gut–brain axis has been elucidated by a multitude of studies linked to neuropsychological, metabolic, and gastrointestinal disorders. For instance, altered microbiota has been linked to neuropsychological disorders including depression and autism spectrum disorder, metabolic disorders such as obesity, and gastrointestinal disorders including inflammatory bowel disease and irritable bowel syndrome. Fortunately, studies have also indicated that gut microbiota may be modulated with the use of probiotics, antibiotics, and fecal microbiota transplants as a prospect for therapy in microbiota-associated diseases. This modulation of gut microbiota is currently a growing area of research as it just might hold the key to treatment.
Hypertext fiction

From Wikipedia, the free encyclopedia

Hypertext fiction is a genre of electronic literature, characterized by the use of hypertext links which provide a new context for typically chooses links to move from one node of text to the next, and in this fashion arranges a story from a deeper pool of potential The term can also be used to describe traditionally-published books in which a nonlinear narrative and interactive narrative is achieved. Mark Z. Danielewski’s House of Leaves (2000), Enrique Jariel Poncela’s La Tournada de Dios (1932), Jorge Luis Borges’ The yard and Julio Cortázar’s Rayuela (1953, translated as Hopscotch) are early examples predating the word “hypertext”, while a common young adult fiction and other similar gamebooks. The Garden of Forking Paths is both a hypertext story and a description of a fictional

Contents [hide]
1 Definitions
2 History
3 Characteristics
4 See also
5 References
6 External links

Definitions [edit]

There is little consensus on the definition of hypertext literature. The similar term cybertext is often used interchangeably with hypertext in the creation of the narrative. Each user obtains a different outcome based on the choices they make. Cybertexts may be equivalent to a novel, and a game. In a novel the reader has no choice, the plot and the characters are all chosen by the author, there is no other person working their way through the novel is not an active participant. In a game, the person makes decisions and decides what To Ecco Poesia, cybertext is not a genre in itself; in order to classify traditions, literary genres and aesthetic value, texts should be of ergodic literature:

In ergodic literature, nontrivial effort is required to allow the reader to traverse the text. If ergodic literature is to make sense a where the effort to traverse the text is trivial, with no extraoeconomic responsibilities placed on the reader except for example:
Life and Love is Only as Complicated as you Make it

Messes are inevitable. So are relationships. It doesn’t matter what type of relationship it is, our lives are ruled by all of the relationships we are involved in. This may be because human bodies are genetically made to reproduce. It seems as if our bodies need/crave relationships in order to survive. But with relationships come messes. Messes and relationships always seem to go hand in hand. Even though the Marko and Alana in

Critics Blog #7 “All Actions are a Snowball Saga”

“All Actions Are Snowballs”
After reading “Saga” by Brian K. Vaughan and Fiona Staples, I realized the basis of the first six chapters is the relationship between Marko and Alana. I think not all scenes in the book involve the two main characters because the author wanted to show how their relationship affects the other characters. The relationship then starts a very long saga. This saga then continues on, gets more and

Eagle Eye Car Chase (2008) HD

Car chase from Eagle Eye featuring a Porsche Cayenne evading a parade of police cars

Critics Blog #6 - Relationship to Survive

In multiple movies there is a plot line where the main characters must work together in order to accomplish a task or get to a final destination. Movies like Harry Potter and the Deathly

Peer review of student Tumblr blogs by classmates at St. Louis University
Ajax

(AI)/as).

1. A son of Telamon, king of Salamis, by Periboea or Eriboea (Apollod. 3.12.7; Paus. 1.42.4; Pind. I. 6.65; Diod. 4.72), and a grandson of Aeneas. Homer calls him Ajax the Telianon, Ajax the Great, or simply Ajax (II. 2.768, 9.659, 14.410; comp. Pind. I. 6.39), whereas the other Ajax, the son of Oileus, is always distinguished from the former by name. According to Homer Ajax joined the expedition of the Greeks against Troy, with his Salaminians, in twelve ships (II. 2.557; comp. Strab. vi. p. 394), and was next to Achilles the most distinguished and the bravest among the Greeks. (ii 768, 17.279, &c.) He is described as tall of stature, and his head and broad shoulders as rising above those of all the Greeks (ii 226, &c.); in beauty he was inferior to none but Achilles. (Od. 11.550, 24.17; comp. Paus. 1.35.3) When Hector challenged the bravest of the Greeks to single combat, Ajax came forward among several others. The people prayed that he might fight, and when the lot fell to Ajax (II. 7.179, &c.), and he approached, Hector himself began to tremble. (215) He wounded Hector and dashed him to the ground by a huge stone. The combatants were separated, and upon parting they exchanged arms with one another as a token of mutual esteem. (305, &c.) Ajax was also one of the ambassadors whom Agamemnon sent to conciliate Achilles. (9.169.) He fought several times besides with Hector, as in the battle near the ships of the Greeks (14.409, &c. 15.415, 16.114), and in protecting the body of Patroclus. (17.128, 732.) In the games at the funeral pile of Patroclus, Ajax fought with Odyssesus, but without gaining any decided advantage over him (23.720, &c.), and in like manner with Diomedes. In the contest about the armour of Achilles, he was conquered by Odyssesus, and this, says Homer, became the cause of his death. (Od. 11.541, &c.) Odyssesus afterwards met his spirit in Hades, and endeavoured to appease it, but in vain.
Using the Hypothesis API the Tufts professor created a map of the text using students annotations.
Hypothesis + Pressbooks

Hypothesis is available as a plugin within Pressbooks.

It can be quickly configured to allow Hypothesis to be used in all or part of the book. [right]

Using the plugin means that all visitors to the site will be able to use Hypothesis within Pressbooks without having to install a browser extension.
1. Online Discussions Introduction

Thank you for participating in this session of L&S Learning Support Services’ online workshop series, “Teaching With Technology.” In the following short opening, you’ll meet one of your facilitators, Theresa Pesavento, and get acquainted with the outline of the upcoming module on the exciting topic of online discussions.

Before we dive in, take a moment to consider the uniqueness of online learning. For instance, while we believe most of you will be joining us from here in Madison, Wisconsin, we also know that you may be participating from places near and far, using the power of the Internet. In this light, we hope that by providing a brief look at our ‘place’ in and around Madison, we are offering a useful context for our culture and geography. And we hope to hear from you as we move through the course—about the topic at hand, of course, and also a little bit about your own place on campus or on your side of the world.
Close Reading with Pressbooks + Hypothesis

Lisez attentivement l’ensemble du texte en passant votre curseur sur les mots en bleu, pour voir les explications. Ensuite cliquez sur le premier fragment marqué en jaune. Faites tous les exercices etécoutez toutes les explications qui s’afficheront à droite.

Objections:
1. Il semble que non, car l’espoir porte sur le bien à venir, dit Saint Jean Damasène. Or il n’appartient pas aux bêtes de connaître l’avenir, car elles n’ont que la connaissance sensible qui ne s’étend pas à l’avenir.
2. L’objet de l’espoir est le bien qu’il est possible d’atteindre. Or le possible et l’impossible sont des différences du vrai et du faux, "qui ne peuvent être que dans l’esprit", selon Aristote. Les bêtes, n’ayant pas d’esprit ne peuvent donc espérer.
3. Saint Augustin écrit : "Les animaux se meuvent d’après ce qu’ils voient." Or l’espoir ne porte pas sur ce qui se voit – "Car ce qu’on voit, comment espérer?", dit Saint Paul (Rm 8, 24). Les bêtes n’espèrent donc pas.

En sens contraire, l’espoir est une passion de l’irascible. Or l’irascible existe chez les bêtes; donc aussi l’espoir.

Réponse: Les passions intérieures des animaux peuvent se découvrir par leurs mouvements extérieurs. Ce sont eux qui manifestent l’existence de l’espoir chez les bêtes. En effet, si le chien voit un lièvre, ou l’épier un osselet, qui sont trop éloignés, ils ne font vers eux aucun mouvement, comme s’ils n’estimaient pas pouvoir le atteindre, mais si leur proie est à proximité, ils s’élancent, comme dans l’espoir de l’atteindre. Ainsi qu’on dit plus haut, l’appétit sensible des bêtes.

At left: Annotations in the ‘publisher’ layer of a close reading activity made in Pressbooks and used in a French literature course. The image is of Averroes’ 12th c. commentaries on Aristotle.

The public can view/use this layer, but only invited experts can write to it. This activity includes:

1. Image
2. Audio commentary
3. Interactive quiz [H5P]
5. Annotation Activity
We built a basic ‘poetry anthology’ in Pressbooks for use in today’s webinar:

- https://university.pressbooks.pub/annotation/blackhawkheld
- https://university.pressbooks.pub/annotation/chapter/psalm/
- https://university.pressbooks.pub/annotation/chapter/a-travellers-song/
- https://university.pressbooks.pub/annotation/chapter/fragments-of-sappho/

If you’d prefer to create your annotations in a private group, we’ve created one for this activity here:
https://hypothes.is/groups/nmoZZZ3y/oeweek-annotation-demo
Create an annotation

political import due to fear or ignorance of technology. But the unparalleled level of material support that Digital Humanities has received suggests that its most significant contribution to academic politics may lie in its (perhaps unintentional) facilitation of the neoliberal takeover of the university.

Neoliberal policies and institutions value academic work that produces findings immediately usable by industry and that produces graduates trained for the current requirements of the commercial workplace. In pursuit of

Select text and click “Annotate”
Add links, images, & rich text [L] and tags [R]
Edit or delete your annotation
Jeremy Dean

Hirsch’s argument was foundational for the Common Core educational program favored by the political right.

Interesting, but I’d like to see a citation here.

Also, not sure it’s fair to say that the Common Core was/is favored by the Right.

hide replies (1)

Gandalf511

Yeah, last I checked the political right was squarely opposed to the Common Core.
This campaign is not about Bernie Sanders.

While this is no doubt a rhetorical move, can really be that humble—this is a story he announced his candidacy in front of himself.

https://hyp.is/AVReZ6B6Ft
Continue the Conversation